LOCATION: R.M. 16.7 on Leon River, Brazos River Basin, about 3 miles north of Belton, TX, in Bell County

DRAINAGE AREA:

3,560 square miles	
One inch of runoff	189,867 acre-feet

DAM:

Type:	Rolled earth fill
Length:	5,524' (including spillway and 418-foot dike)
Maximum Height:	192'
Top Width:	30'

SPILLWAY:

Crest Elev:	631.0' msl
Length	1,300'
Type:	Broadcrested
Control:	None

INFLOW:

Spillway design flood peak, cfs	608,400
Spillway design flood volume, ac-ft	3,910,000
Spillway design flood runoff, inches	20.59

OUTFLOW:

Total routed peak outflow, cfs	472,500
Spillway, cfs	472,500
Outlet, cfs	0

OUTLET WORKS:

Type:	1 conduit with 3 gated inlets
Dimension:	22' diameter
Invert Elev:	483.0' msl
Control:	3-7'x22' broome-type gates

LOW-FLOW OUTLETS:

Type:	1-3'x3' gated outlet discharging into flood control conduit
Invert Elev:	540.0' msl (at intake to wet well)

POWER FEATURES: FC Act of 1954 authorized modification for hydropower at Belton upon impoundment of Proctor Lake. Previous studies determined hydropower to be infeasible, however, the Belton Recon Report dated Oct 81 has indicated feasibility. Subsequent studies are scheduled for completion in FY 83.

Feature	Elev Feet (msl)	Reservoir Area (acres)	Reservoir Capacity: Accumulative (ac-ft)	Runoff (inches)	Reservoir Capacity: Incremental (ac-ft)	Spillway Capacity (cfs)	Outlet Works Capacity (cfs): 1 Int	2 Int	3 Int	Low Flow Outlet Capacity (cfs)
Top of Dam	662.0									
Max Design Water Surface	656.9	37,340	1,876,700	9.88		472,500	13,510	36,890	30,480	640
Top of Flood Control Pool and Spillway Crest	631.0	23,620	1,097,600	5.78	640,000		12,300	24,600	27,900	590
Top of Conservation Pool	594.0	12,300	457,600	2.41	372,700		10,300	20,800	23,600	510
Invert at Lowest Intake	483.0	42	278							
Sediment Reserve					84,900*					
Total Storage					1,097,600					
Streambed	470.0									

*Estimated 50 years of sediment storage below elevation 547.0' msl.

AUTHORIZATION: Flood Control Act approved 24 Jul 46 (PL 79-526) (HD 88/81/1). Modified by Flood Control Act approved 3 Sep 54 (PL 83-780) (HD 535/81/2).

FINAL PROJECT COST (OCT 80):

Federal:	$17,191,734.04
Non-Federal:	None*
Total:	$17,191,734.04

ANNUAL O&M COST (FY 81):

Federal:	$ 704,600
Non-Federal:	64,700
Total:	$ 769,300

COST ALLOCATION METHOD:
Use of facilities (pro rata)

STATUS OF PROJECT: Construction began Jun 49. Deliberate impoundment began 8 Mar 54. Ultimate project conservation pool of elev 594.0 deliberate impoundment began 1 May 72. Project is complete and operational.

*NON-FEDERAL PARTICIPATION AND LOCAL COOPERATION: Water supply storage contracts with the Brazos River Authority were approved on 15 Jan 58 and 13 Dec 60 for 96.78 percent (360,700 ac-ft) of the conservation storage space between elevations 594.0 and 540.0 ft msl. BRA will pay $5,124,999.77, in addition to their share of annual O&M cost, for this water supply storage space. Fort Hood Military Reservation is utilizing the remaining 3.22 percent (12,000 ac-ft) of conservation storage space between same elevations.

LOCAL AGENCY: Brazos River Authority and Fort Hood

LAND ACQUISITION

	Guide Contour ('msl)	Area (Acres)
Fee simple	605.0	24,241
Easement	642.0	6,574
Permit		1,430
Total		32,245

FLOOD DATA:

Date	Peak Discharge (cfs)
Dec 13 (Estimated)	76,000
Apr 45	70,600
May 57	112,000
Oct 59	83,500
May 65	147,000

Bankfull capacities below dam: Leon River to mouth: miles20,000 cfs; Little River from mouth of Leon River to mouth: 10,000 cfs (1).

(1) Little River channel capacity restricted locally to 3,000 cfs; however, in connection with the comprehensive survey report on the Brazos River Basin, proposals to increase this to 14-18,000 cfs are being considered.

Gaging stations: Cowhouse Creek near Pidcoke, Leon River at Gatesville and near Belton and Little River at Cameron.

REMARKS: After impoundment of Proctor Lake, the conservation pool elevation at Belton Lake was raised on (1 May 1972) from 569.0 to 594.0 ft msl which increased the total conservation storage from 125,700 ac-ft to 372,700 ac-ft and the dependable yield from 75.0 MGD to 104.7 MGD.

Dependable yield (w/ Proctor Lake)**: 162.0 cfs or 104.7 MGD

**Based on critical dry period from 1949-1956 and 50 years of sedimentation

Visitation (1981): 4,083,197

Shoreline at top of conservation pool: 136